Application No. 10/538,423

Paper Dated: August 30, 2010

In Reply to USPTO Correspondence of March 30, 2010

Attorney Docket No. 4544-051674

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

Claim 1 (Currently Amended): An isolated nucleic acid molecule for a salt-tolerant L-myo-inositol 1-phosphate synthase from *Porteresia coarctata*—(PINO1) <u>PcINO1</u> comprising the nucleic acid sequence of <u>SEQ ID 1</u> <u>SEQ ID NO: 1</u> or a nucleic sequence encoding <u>a</u> protein comprising <u>SEQ ID 3</u> <u>SEQ ID NO: 3</u>.

Claim 2 (Cancelled).

Claim 3 (Currently Amended): A process of obtaining cDNA, encoding a salt-tolerant L-myo-inositol 1-phosphate synthase comprising:

- (i) isolation of a full-length cDNA for the L-myo-inositol 1-phosphate synthase gene from the leaf of *Porteresia coarctata* by reverse transcription followed by polymerase chain reaction; and
- (ii) sequenceing of the isolated L-myo-inositol 1-phosphate synthase gene, wherein the sequenced synthase from *Porteresia coarctata* (PINO1) PcINO1 is encoded by a the nucleotide sequence SEQ ID 1 SEQ ID NO: 1 and has a deduced amino acid sequence SEQ ID 3 SEQ ID NO: 3.

Claim 4 (Currently Amended): The process as claimed in claim 3, wherein the isolated full-length cDNA of <u>PINO1</u> is cloned into a suitable bacterial expression vector pET 20B(+) to produce <u>expression plasmids</u> an <u>expression plasmid</u>.

Claim 5 (Currently Amended): The process as claimed in claim 4, wherein-said plasmids are said plasmid is introduced into the host strain E. coli BL-21 (DE 3) for obtaining an expressed PINO1 gene product by culturing the transformed host strain to express the PcINO1 gene product.

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Claim 6 (Previously Presented): The process as claimed in claim 5, wherein the expressed PINO1 proteins are solubilized in a solubilization buffer containing 8M Urea, 0.5 M NaCl, 20 mM Tris-HCl, pH 7.5,10 mM ME and 2 mM PMSF.

Claim 7 (Previously Presented): A plasmid comprising the isolated nucleic acid molecule of claim 1.

Claim 8 (Previously Presented): A bacteria comprising the isolated nucleic acid molecule of claim 1.